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A New Metaphor for Understanding Management Control Practices

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Abstract: Many researchers in management use metaphorical representations of organisations. Some even go so far as to assert that all modelling of organisations uses an implicit metaphor. The role of metaphors within the theory of organisations is didactic, cognitive and theoretical, allowing us a better understanding of the organisations we are studying.

But at the same time, metaphors can distort and restrict our understanding. Thus, the cybernetic metaphor in management control overemphasises the technical dimension, representing practices of control almost exclusively in terms of the instruments used.

The purpose of this communication is to discuss the use of a metaphorical approach and its limitations. We also want to propose an alternative metaphor to better understand diverse aspects of the practice(s) of control, in particular in the case of not-for-profit organisations.

Key Words: *Management control, metaphor, modelling, control practices*

A New Metaphor for Understanding Practices of Management Control

Introduction

Although traditional management control has often been called into question since the observation of its “relevance lost” (Johnson & Kaplan, 1987), research in control – or at least its expression in academic journals – continues to focus essentially on the instruments available and the way they are used. Whether this phenomenon is explained by the “McDonaldisation” of research (Berland & Gervais, 2008) or by the adoption of “compartmentalised” approaches (Ferreira & Otley 2009), it is to be regretted insofar as it creates a frozen image of this object of research and perpetuates the instrumental representations that have been made of it, notably the cybernetic representation. This corresponds to a mechanistic and deterministic view of organisation and to principles of scientific management that have long since been discredited, and which fail to take into account either the current reality of organisations or the advances that have been made in understanding them.

And yet, beyond mere literary ornament, the metaphorical representation of an object fulfils a number of functions, often extremely useful for scientific knowledge. Whence our desire to propose an alternative representation of management control.

This article is divided into three parts. The first section focuses on the metaphor as a figure of rhetoric. We examine how it has been used in the theory of organisations. Particular attention is paid to the field of management control. The second section sets out our proposal of an alternative metaphor of management control. Finally, after describing the findings and the limitations of the research, we focus on its implications.

1. Metaphor as a Figure of Rhetoric

A metaphor is the global application to a “target” domain of representations drawn from a “source” domain (Indurkha, 1991). Metaphorical transfer should not, therefore, be confused with analogy, which is much more precise and focuses on a small number of relations in order to transfer an explanatory structure from one entity to another.

For a long time, the metaphor was limited to its aesthetic function and described as a practice detrimental to scientific knowledge (Pinder & Bourgeois, 1982). Bachelard (1975), for instance, believed that a “science which accepts images is [...] a victim of metaphors”. For its critics, the metaphor is an epistemological obstacle that misleads unwary scientists.

And yet, in recent years, many researchers have considered the metaphor as a way of understanding the world, as a means for individuals to construct the meaning of their actions (Lakoff & Johnson, 1980). It can then become scientific, when it is used not for its expressive functions, but for its contribution to the processes of knowledge.

1.1. The use of metaphor in management sciences

In management sciences, many researchers have used metaphorical representations of organisations: Morgan (1980, 1984, 2006), Tsoukas (1991, 1993), Grant & Osrick (1996), Palmer & Dunford (1996), Meyer (1984), Le Roy (1997, 1999, 2001), etc. Morgan’s book

(1999), which presents a synthesis of metaphors that have marked the study of organisations, shows clearly how the changes undergone by the theory of organisations are expressed in the way the latter metaphorizes its concepts, models and theories. For example, the metaphor of the organisation as a machine corresponds to the mechanistic and deterministic view of the classical school and the principles of scientific management.

There is no lack of examples. Management sciences have used many concepts borrowed from disciplines often far-removed from the field of organisations. There are the mechanistic and organic organisations of Burns & Stalker, the ecological model of Hannan & Freeman, works drawing inspiration from military strategy such as those by Ries & Trout, and authors who based their interpretive framework on cultural geography, like Casey, or on architectural theory, like Yanow.

It is then reasonable to believe that the metaphor is not a simple literary ornament, but that it fulfils specific functions (Landheer, 2002) that explain its use.

Firstly, it can have a denominative function, allowing one to approach economic processes from a syntagmatic point of view. For example, “entry barriers” are an effective way of expressing the idea of elements that make it difficult to gain access to a given sector. Likewise, the expressive function allows to clearly formulate an idea that one wants to communicate. For example, the “cash cow” describes a highly profitable activity requiring little new investment and from which the profits can be used to finance other activities. These denominative and expressive functions have a descriptive purpose.

But metaphor can also be used for its didactic, cognitive and theoretical functions, and it is no doubt in these roles that it is most useful to scientific language.

- The importance of the didactic function had already been highlighted by Aristotle. By applying knowledge from one, familiar domain to another, poorly-known domain, the metaphor has strong explanatory value, behaving as a “catalyst to understanding” (Löffler-Laurian, 1994). Thus, the “glass ceiling” clearly evokes the invisible barrier encountered by certain employees in their ascent through the hierarchy of an organisation.
- The cognitive function is explained by the fact that the metaphor allows to “re-conceptualise” a term under the influence of a concept belonging to another domain (Landheer, 2002). This is the case, for example, when Greiner uses the concept of life cycle to analyse the development of organisations. He invites us to compare the phases of development of an organisation with those of a human being, to identify the different successive stages and, for each “age”, the dominant interests and the crises necessary for transition to the next stage. So he uses the life cycle as an image that throws light on the way he considers the development of organisations.
- Lastly, the theoretical function is fulfilled by “metaphors that play, at least temporarily, an integral and irreplaceable role in a theory or discipline” (Landheer, 2002 [our translation]). The metaphor then plays a part in scientific knowledge by forming part of “the fundamental project that characterises science, namely: explanation” (Marchal, 1980 [our translation]). It has the power to invigorate theories, to impel thought, to question knowledge. According to Hannan & Freeman, for example, it was the transfer of the ecological model that led them to formalise an analytic model of their subject of study.

1.2. Metaphors of Management Control

The field of management control is no exception to this metaphorization. The metaphor most widely associated with management control is drawn from concepts of cybernetics (Beer, 1984) and used for didactic purposes. Thus, the image of the thermostat to illustrate cybernetic control based on results helps to explain the links between the four stages of the Deming cycle (Plan / Do / Check / Act) or the principles of the Management by Objectives theorised by Drucker.

But a study of the articles published in some of our research journals reveals that this is not the only metaphor. Hofstede (1981) points out that control systems can also be seen as non-cybernetic systems: political, intuitive, etc. In two French journals¹, control systems have been described as a representation of games of power (Masse, 1996), the interaction between instrumentalist and informal dimensions (Guibert & Dupuy, 1997), a means of collective learning (Nobre, 2001), or even a means of surveillance attached to the metaphor of discipline (Lambert & Pezet, 2007). Likewise, in English-language publications², research describing management control as a collection of practices, a set of systems (Malmi & Brown 2008), can be found alongside others adopting Foucauldian theoretical frameworks and the metaphor of surveillance (Cowton & Dopson, 2002). So diverse representations of control appear to coexist, although they are often implicit.

Nevertheless, the articles published over the last ten years in CCA and FCS suggest that French research is most often focused on the instruments of control and the way they are used (Berland & Gervais, 2008), although the consideration of behavioural and managerial dimensions is not completely absent, allowing some comparisons to be drawn between French-language research and English-language research, in which more importance is attached to these dimensions. But even in the English-speaking world, the technical dimension often predominates (Young, 2007). No doubt, as Berland & Gervais (2008) observe, the “McDonaldisation” of research is largely responsible for this phenomenon, but the cybernetic representation of control also plays a part. To analyse control, one must start by describing the tools used; it even appears that one can limit oneself to that.

However, by limiting itself to the instrumental dimension, this research presents a truncated view of management control. It is true that this lends itself more readily to the limited space of an article in a journal and deals with elements that can be reduced to a few variables, easier to communicate. But they only give a partial view of what control is. And that is why we wish to propose an image to convey the idea that control comprises not only the instrumental dimension, but also organisational and human aspects. We have sought to develop a representation that reveals the tensions inherent in management control (between the “technical” pole and the “human” pole, between conformity and performance, between visible and hidden phenomena, between regularity and change), those tensions that place control in a paradoxical universe, as Simons underlined (1995). We wish to propose an alternative representation to the cybernetic one, expressing the idea of an object of research that is more complex to apprehend than one might imagine at first sight. And this is what we hope to do with the metaphor of the iceberg.

2. A New Metaphor for Management Control

Following the metaphor of the iceberg, we present our proposed representation of

1 Comptabilité Contrôle Audit (CCA) and Finance Contrôle Stratégie (FCS).

2 We have taken articles from Management Accounting Research as examples.

management control in two steps. We start by describing the dimension above the surface, immediately visible, before moving on to examine the hidden, submerged part, much larger but also more difficult to discern, the part that explores the social and political dimensions of control systems.

2.1. The visible dimension

The study of management control requires, at least as a first step, to look at the “visible tip of the iceberg”, the part that one discovers on the first approach: the instruments, procedures and techniques of management control. This is what is perceived and expressed by most of those who decide to endow an organisation with control systems: a technical function, focused on quantitative, monetary instruments. According to studies of this visible part of the iceberg, these instruments are introduced when it is believed that they can meet a need of the organisation and/or its managers, but also sometimes to allow institutions to satisfy external directives. These studies adopt a structural-functionalist perspective, considering the emergence of control as a response to the need for coordination, surveillance and assessment.

2.1.1. Meeting an organisational need or an external directive

The emergence of management control systems can be explained by the need to provide a response – in the form of instruments – to the needs of managers. This point of view is upheld by representatives of the managerial approach, and notably Anthony (1988), for whom the manager is an element of control and management control should provide information “that helps the manager to make decisions”. The authors in this movement adopt the classical theory of organisations, according to which the social sciences should be used to help the managers of organisations to improve their operating efficiency (Desreumaux, 2005).

This managerial approach can shed light on the reasons for the establishment of control systems. From a structural-functionalist perspective, management control researchers seek to determine the mechanisms best-adapted to the needs of the organisation. This conception is then deterministic: in developing control systems, organisations are not following a proactive approach but experiencing pressure from their environment and responding to it³. This is the conception upheld as early as 1977 by Chandler, who argued that one can explain the emergence of the management control function as the response of organisational structures to the constraints of their environment.

Over recent years, our main field of research – not-for-profit organisations – has provided a useful opportunity for the observation of these phenomena. There is a growing demand for control systems in many not-for-profit organisations. Chandler’s affirmation can thus be illustrated by bringing to light the environmental and organisational evolutions⁴ that explain the development of instruments of control in these organisations. An exhaustive inventory of these elements would be beyond the scope of this paper, but we can mention three main environmental factors that have influenced the need for instruments of management control:

- Society has evolved towards managerialism, in other words towards a “system of description, explanation and interpretation of the world based on the categories of management” (Chanlat, 1999 [our translation]) that now pervades all organisations

³ Berland (1999), for example, showed that the development of budgetary control in France is linked to both the new managerial ideologies of the beginning of the last century and the degree of predictability of the environment.

⁴ Although we acknowledge the somewhat artificial nature of a distinction between internal and external factors and the fact that there are interactions between them.

and informs the public debate with concepts of steering, management, performance and other ideas of promoting responsibility. The main concepts of management control then penetrate these organisations, and the (real or imagined) model of its application in the private sector becomes an inescapable norm, a sign of good management that these other organisations must apply;

- structural reforms to modernise public management, qualified as “managerial” insofar as they aim to bring new ideas and methods to the public sector, drawing largely on private-sector management techniques, and are intended to act as a lever to reform the State;
- and budget restrictions that heighten the need for control and management systems to satisfy the demand for increased financial efficiency⁵ and oblige organisations to acquire instruments to justify the legitimacy of subsidies granted to them and to present themselves as structures “under control”, managing their resources in a responsible manner. In this context, the instruments of control act as signals to observers from outside the organisations, and particularly their sponsors.

If these environmental factors, and the evolutions they convey, produce effects that can be observed in a widening gap between the *modus operandi* of organisations and their needs, they are not sufficient to justify the use of instruments of control for anything more than the simple role of signalling mentioned above. The development of control systems in the institutions studied is also due to recent evolutions within these organisations. These can be divided into three main categories:

- with the widening of their missions, these organisations have developed new activities, obliging them to acquire instruments to inform the many decisions they have to make as a consequence;
- their opening up to new partners, especially private companies, has obliged them to take into consideration the requirements of these latter, to modify their choice of activity and to assimilate a new language and new instruments allowing them to establish a dialogue;
- the modification of their traditional operating methods, the rigidity of which has appeared increasingly intolerable as the organisations have opened up to society and taken on new functions, the requirements of which seem contradictory to those they had known before.

These environmental and organisational evolutions, the multiple and interdependent nature of which is poorly expressed in the brief, sequential presentation that has been made, situate the institutions studied in a broadly market environment, a potential source of conflict with their objectives and traditional operating methods. Consequently, they create a need for management instrumentation and lead managers to develop the visible part of management control: the instruments allowing to take on board these evolutions rather than just undergoing them, techniques and procedures integrating the tensions between short term and long term, the user and the customer, private and public resources, independent resources and grants... These are therefore essentially procedures of self-control that are implemented, and

⁵ Paradoxically, this need for tools of control and supervision can also appear in a situation of growing resources. This was the case for French museums in the early 1980s, when extra funding, combined with the diversification of its sources, led them to develop new management tools.

the traditional instruments of management control appear to provide solutions capable of meeting these new needs.

2.1.2. Acquiring instruments of control

But if we are used to thinking that control systems serve to manoeuvre complex organisations, it may be surprising to observe that in the organisations studied, the motivation for developing management tools appears to derive more from a response to external demands than from a need for information to help decision-making by their managers.

The evolutions mentioned above call for organisational changes, to make these institutions more rational and more responsible in their management. The concept of autonomy lies at the heart of this issue, because it appears to be widely accepted that a certain managerial autonomy and a reasonable degree of freedom of initiative are indispensable for steering these institutions. What is more, managerial control can only find its place alongside autonomy: when the organisation (or the agent) to be controlled has no autonomy, there is no uncertainty: when we know the inputs, we necessarily know the outputs; the manager's expertise is redundant and the control is a perfect cybernetic process. We can therefore consider that the very purpose of control mechanisms is to organise autonomy, or even to encourage it (Bouquin, 2005b). To that end, the instruments of management control must satisfy two main needs: the need for information, without which any strategic view is impossible, and a need for management so that the application of strategic decisions can be monitored.

These needs exist within organisations, but also at the interface between these institutions and their partners: supervisory authorities, funders, etc. So the instruments of control also serve to facilitate dialogue with these partners. However, it can be argued that this dimension is not really a question of management control but of reporting, which plays a part in the evaluation of public policies. It is a matter of accounting to the supervisory authorities, rather than managing the organisation in the strict sense of the term. For the management control system to function, these two elements must be linked, and a dynamics of management must be created between the indicators of accounting and those of management, in other words between national strategic issues and the operational objectives of the organisations. This is the idea of results-based contract management: goals are set for the managers of different units (or of the organisation as a whole in the case of the interface between the supervisory authority and the organisation), allowing them a relative freedom of action in using the resources allocated to them to achieve those goals⁶. It is assumed that the framework determined by the objectives will restrict opportunistic behaviour, while at the same time devolving decision-making to those who, being closer to the ground, are better at choosing the most appropriate means to achieve the objectives. And yet the research carried out (Chatelain-Ponroy, 2008) shows that the link between the accounting indicators and the systems of direction is not always established. Far from it. Managers of organisations expect instruments of control primarily to allow them to satisfy the demands for information they receive, to respond to directives imposed on them (Dejean et al., 1998) or to dialogue with external partners. In these three cases, the instruments of control are used as “signalling tools”, in other words tools with the function of sending a signal outside the organisation, to send a message, to justify certain choices, or to demonstrate that the organisation formally meets the requests of its partners. We therefore consider that they belong to the formal,

⁶ The “contracts of performance” signed between the minister of state for the budget and certain managerial ministries pursue these objectives, as the managerial ministries must undertake modernisation programmes, improving productivity by reorganising their departments and modes of action, in return for which they receive greater visibility about the future evolution of their operating and staff budgets over a number of years..

visible dimension of the iceberg of management control. One of the explanations for this disconnection between reporting and direction, between the exterior and the interior, certainly resides in the conflict of legitimacy caused by the introduction of management tools, which are a product of economic legitimacy, in organisations where the prevailing legitimacy is of a more traditional nature (Burlaud in Colasse, 2000). We shall return to these tensions in section 2.2.

Several of our works show that in the organisations studied, instruments of management control are used essentially with a view to influencing funders favourably or promoting the visibility of the institution. This reflects the thesis proposed by Meyer (1986), that control systems do not serve to satisfy the needs of the organisation, but to display a rationality that endows the organisation with legitimacy within its institutional environment. The neo-institutional theorists argue that the desire for conformity to the institutional principles of their organisational field leads companies to adopt practices more for ceremonial purposes than with a view to improving efficiency (Meyer & Rowan, 1977). From this point of view, management control systems can be seen as the reflection of isomorphic processes. This might explain why the utility of management control systems for the institution itself appears to be harder to appreciate than their utility for external purposes.

This primacy of reporting tools over management tools and the disconnection between the two systems underline the role of the centripetal movement that control systems must undergo to find their place. Instruments of control must first prove their usefulness in informing policy and strategic choices (the visible, “external” dimension of the iceberg) before they can penetrate organisations and produce the necessary organisational changes within them (the invisible, “internal” dimension of the iceberg).

So to begin with, there is a diffusion of management control by capillary action: the instruments of control are adopted in response to external evolutions and/or directives⁷; they remain “on the surface” of the organisation, insofar as they are used essentially to equip the interface between the organisation and its environment without producing any real change in the actual management of the organisation. In this present attempt to develop a new model, we say that when organisations only adopt the traditional tools of the control system, they reduce it to its formal dimension, what we call the “visible tip of the iceberg”. In other words, they comply with the letter of the system but neglect its spirit. In this interface function, the instruments of control therefore remain largely reduced to their formal dimension; they only assume their full significance when they penetrate to the heart of the iceberg, the heart of the organisation, that is to say when they move from the stage of formal and visible adoption of the tools to their internalisation, which is less easily discerned.

2.2. The hidden part of the iceberg

Management control cannot be reduced to the implementation of a set of instruments directed at economic optimisation, and these tools are not “simple instruments allowing economic calculation in companies, [...but] socially-constructed norms, rules and customs that are accepted by the agents who use them” (Lemarchand & Leroy, 2000 [our translation]). It requires a mobilisation of the agents concerned, which cannot be achieved if the tools remain “on the surface” of organisations, if they are only known to the managers or if they are concentrated in the hands of the controller. Consequently, it is characterised not only by a visible dimension but also by a hidden, informal dimension, relating to the remote control of

⁷ Moreover, the factors of adoption can be “invisible”, unspoken or unconscious: this is the case for most of the factors leading to the ceremonial adoption of control systems.

behaviours and therefore comprising human and managerial aspects. Here we shall deal with two questions relating to these “invisible” aspects: the adaptation of management control systems and their internalisation by the agents.

2.2.1. Adapting the instruments of control

The adoption of management control tools by organisations that do not constitute their natural milieu stems from a simple idea: “To meet the need for management that has arisen in our organisation, why not adopt an “off-the-shelf” model that that has proved itself in other sectors?” Quite apart from the controversial hypothesis of the rationalising capacity of control tools (Boussard & Maugeri, 2003), this apparent simplicity conceals a serious problem: that of the relevance of these tools in a different context to that in which they were developed. The theoretical foundation here is that of contingent models: it is a question of relating different organisational characteristics to different forms of control systems and recognising, as Bouquin put it (2005b [our translation]), that “management control [...] is subject to different variations that are said to be ‘contingent’”. The research conducted from this perspective is based on the work of Anthony (1988), who observed that there exist variations in management control practices, related to external influences from the environment, factors internal to the organisation and industry-specific factors.

In the field of not-for-profit organisations, two industry-specific contingent factors deserve particular attention. Two different rationalities coexist: one political, expressed in the missions of public service entrusted to institutions, and the other professional, possessed by operational agents and expressed in service quality objectives. Now, the adoption of management control practices in this field introduces a third, economic rationality, linked to the need to regulate public spending, and reveals the antagonisms both between economic and political rationalities and between economic and professional rationalities⁸.

Among the questions relating to the tensions between economic and political rationalities, two are particularly worth noting: the adverse consequences and limitations of the traditional model of management control in such a context, and the link between management control and the evaluation of public policies.

The limitations and adverse consequences of management control systems are not specific to not-for-profit organisations. They stem mainly from the fact that performance evaluation presupposes the selection of indicators. However, as the theorists of control acknowledge, such selection focuses the attention on those elements to which a figure can be put: the measurables are therefore overweighted in relation to the unmeasurables. Moreover, we know that results-based management leads to stress, opportunistic behaviour and manipulation (Hopwood, 1972). Lastly, splitting the organisation up into centres of responsibility can be an obstacle to cooperation. In not-for-profit organisations, these adverse consequences are exacerbated by the lack of automatic link between products and externalities. They also lead to a distinction between made between management control and the evaluation of public policies. Thus, for Gibert (2003), these two systems should be brought together because they share the same concern, but differentiated in their approaches. The difficulty then resides in the link between the two.

The limitations and adverse consequences of management control systems explain why such systems cannot be introduced by the direct transposition of tools and methods developed in a

⁸ Conflicts can also arise between political and professional rationalities, but these conflicts are less important from the point of view of the introduction of management control, and so we shall not go into them here.

completely different context. But the instrumentation of the management of public organisations appears to have been marked both by a certain conceptual deficit and by the more or less naïve importing by consultants of management fashions from the private sector (Nioche, 1991)⁹. Chatelain-Ponroy & Sponem (2009) showed that although it is quite reasonable to reconsider the management of public service organisations, imagination is needed to develop tools appropriate to the specificities of the public sector.

So, having emphasised that the adoption of management control tools can largely be explained by phenomena of isomorphism and by the desire to give the impression of a “managed” organisation, we must now specify that if these tools are to allow a genuine instrumentation of the organisations studied, they need to be adapted to the specificities of the organisations, in order to make up for the conceptual deficit mentioned above. It is therefore not sufficient for the organisations to conform to the formal image of “managed” organisations; they must acquire the appropriate tools to allow them to improve their management systems. We could then say, echoing what Burchell et al. (1980) wrote on the subject of accounting tools, that once they are established, control systems become organisational and social phenomena that can be used for many purposes.

But we also believe that the apparent contradiction between economic and political rationalities illustrates the difficulties of the desirable extension of the discipline of management control. It calls for ways to be found to integrate objectives and criteria of evaluation into control systems, in other words to analyse the connection between the system of management control and the system of public policy evaluation, bearing in mind that no decision support techniques or management control tool can take the place of political arbitration.

Not-for-profit organisations also often possess a professional rationality that must be incorporated into management control systems in order for the latter to find their place (Abernethy, 1995). These are organisations within which the operational agents enjoy wide autonomy and substantial power over the conduct of their work, allowing them to act independently, minimising the influence of the technostructure on their work.

But management control systems are a form of technostructure, so they naturally meet with resistance from professionals in the operational centre¹⁰. Likewise, the professionalization and intensification of management changes the balance of power, thereby provoking resistance from the operational agents. This is because the instrumentation of management aims to relate agents’ choices to the interest of the organisation as a whole, and it therefore *de facto* reduces the autonomy of those agents. Thus, Chiapello (1998) defined control as “an ordering influence”, the purpose of which is to reduce the degree of freedom given to individuals in organisations. It is therefore understandable that it should be rejected by agents fiercely protective of their autonomy. In this context, criticism of the legitimacy of management control tools equates to criticism of the power it exercises (Laufer & Burlaud, 1980).

The main lesson to be drawn from these studies is that in this type of organisation, change cannot come from the “administrators” but only through the evolution of the professionals,

9 Abrahamson (1996) showed the importance of the role played by fashion in the adoption of new management practices.

10 This phenomenon is neither new nor specific to our fields of study: staff departments encountered the same type of resistance when they appeared in organisations following the works of Taylor, notably.

who have the ability to contribute to the success or failure of the reforms¹¹. The simplistic model of the pilot that is so popular in traditional management control is jeopardised by that of the cognitive and political autonomy of the agents (Lorino, 1995). This capacity for resistance by the operational agents draws our attention to the mechanisms of internalisation that can make or break the changes conveyed by management control systems.

Finally, the conjunction of three sometimes conflicting rationalities suggests a high degree of uncertainty about the function and role that management control should fulfil in these organisations. It is reasonable to affirm that for the management control function to be an aid to steering, a relation must be established between the “classic” skills of the management controllers and the specificities of the organisations, taking care not to confuse the need for instrumentation with the complexification of control systems. It is therefore necessary to work on the forms of management control specific to these particular fields, in other words to consider the adaptation of the control tools and techniques needed to equip these organisations without calling into question their very nature and specificities.

However, as we observed earlier, management control cannot be reduced simply to its tools, and it can also be seen both as a language that can unify behaviours and as a process of socialisation of managers. The perspective adopted is then interpretivist and comprehensive; it aims to explore the problem of the construction of the organisation by the agents and thereby plunges even deeper into the iceberg of control.

2.2.2. Internalising the instruments of control

Many studies of management control analyse, at least as a first line of inquiry, the tools that are implemented. The predominance of the technical dimension is explained by the use of tools that are essentially financial, which can eclipse the other components of control, particularly the informal ones. Nevertheless, because they simplify the reality, condition the coherency of an organisation, influence the behaviour of agents or shape the balance of power, the instruments of management control are elements of an “invisible” technology (in the sense of Berry) that brings symbolic resources into play. They “originate in social games, while at the same time constructing other games, which they “enact”, to use the well-chosen expression of K. Weick (1979)” (Boussard & Maugeri, 2003 [our translation]). Up until now, we have presented a very functionalist view of the use of management control systems, and as a consequence we have neglected certain fundamental aspects of this object, unsuspected when it is reduced to its instrumental dimension, to which we should now turn our attention.

Indeed, as long ago as 1965, Anthony affirmed that the controller may be entrusted with building and operating the system used by managers, but the true exercise of control falls to the latter. The hidden, informal, internalised part of control systems is therefore linked to the idea of interrelations between agents and behaviour, insofar as they consist in sharing representations of performance and modes of coordination. Here we shall focus on two areas: one where control is studied as a language and the other where it is perceived through its relation to the agents.

- **A vernacular language**

Even now, management control is too often seen as a tool of measurement that presents established facts. And yet, like all management tools, a management control system is a

¹¹ So, for example, studies by Lapointe & Rivard (1999) on the introduction of information systems in hospitals show that the horizontal specialisation, the power of doctors and the coalition of operational agents around different issues create a resistance to innovation and constitute barriers to the adoption of new systems.

symbolic mediation between the agents of the organisation. For that reason, it can only be a reflection of political and cultural choices (Burlaud & Simon, 2006), resulting from a historically situated process of reasonable incomprehension giving rise to coproduction by the agents of shared symbolic representations (Philippe & Rainelli, 2002).

Indeed, management control is firstly a language, in the sense that it is a system of signs forming a conduit of information, which it produces and receives, and allowing a representation of the organisation. Sociologists have clearly shown how a language carries within it “a worldview that is necessarily adopted by those who speak it” (Rocher, 1970 [our translation]) and how it therefore helps to unify behaviour, construct the identity of an organisation and coordinate the actions of its different members by forging homogeneous attitudes. Besides, the implementation of a management control system often involves adopting a form of language of scarcity, which must help to raise awareness about the major constraints on the organisation.

Furthermore, as the system of management control is based on a modelling of the organisation, it has to reduce the complexity of the latter by focusing on certain aspects of reality to the detriment of others, which Boussard (2008) calls the blindness effect. When performance is measured solely in terms of financial results, for example, agents tend to favour actions that produce a positive effect on the financial results, for example by playing their own game to the detriment of the collective interest. This was underlined by Berry (1983, our translation), when he stated that management systems are “elements of an invisible technology, the harmful effects of which are all the more implacable as it is left to operate unseen”.

In addition, the language of management control can modify the existing modes of organisation. Because management control gives more power to managers and financial officers, its system of reference tends to be taken up by all the decision-makers, thereby modifying the balance of power between groups. More precisely, Fligstein (1987) shows how strategic changes impel certain agents to power and how these agents then enforce their views by imposing their decision-making criteria. In this way, management control, as a vernacular language, expresses a view of the organisation that benefits the accountants, controllers and financial officers and allows them to reach the highest positions in organisations while giving them the illusion that everything can be managed with figures. And yet the specificities of the organisations we have studied do not allow management to be reduced solely to management by figures. Ill-equipped for dealing with certain questions, the system of control can simply ignore them and so give the illusion of their insignificance. In this case, image prevails over reality and distorts it.

- **A social phenomenon**

But management control is also recognised as being a system of management governing behaviour and relations within the organisation. As such, it has a social dimension alongside the instrumental component, and must be studied as a process of “vertical and horizontal animation, the living ingredient of cold organisation charts, what makes them function in practice” (Bouquin, 2005a [our translation]). Consequently, analysing the comprehensive dimension of this tool calls for an examination of how the agents relate to it. There are several aspects to this question, and we shall look at two of them. The first relates to the influence

that the management control system exerts on cooperation¹² and power relations. The second deals with questions of promoting the responsibility of agents and the processes of comprehension and internalisation involved.

Because it is social, the activity of an organisation contains and combines the search for power and rationality in the use of power as an objective and as an economic means. Thus, Boussard & Maugeri (2003) observed that management systems play a role in organising social relations. Cyert & March (1963) showed how decisions are made in organisations within a dynamics of power struggles between groups, and Anthony (1957) pointed out that management control is connected to attempts made by one person to direct or influence the actions of others, which means that the control system says something about the distribution of power in the organisation and can play a part in changing it. We know that since their creation, staff departments have been led to play latent roles on the social stage of the organisation, entailing a redistribution of power within the organisation.

But although management control systems raise questions about power relations, their primary objective is nevertheless to govern behaviour. They comport standards for results, through which they seek to establish standards for behaviour. Indeed, observation of practices shows that when it is applied too strictly, the cybernetic type of management control leads to irresponsible conduct, an overvaluation of the short term and the neglect of coordination needs. Moreover, managerial situations rarely satisfy all the conditions for cybernetic control, and this “cybernetic imperfection” explains the importance of the responsibility exercised by managers and of their socialisation (Bouquin, 2005b). The concept of responsibility lies at the heart of these situations (Moriceau & Villette, 2001): management control should allow to demarcate responsibilities, to make them visible and to reprimand or reward those responsible. This influence of control tools over behaviour and relations places the agents at the heart of the management process, and so the expansion of managerial concerns in organisations is accompanied by recognition of the supervisory function that must reconcile the potential contradictions between the new managerial models introduced and the traditional modes of operating. Clearly, beyond the instrumentation of organisations, it is the question of the internalisation of management control systems that is central to the construction of an original public management. And yet this question is absent, as far as we know, from works on New Public Management, and so there is no response as to how agents can be led to adhere to its principles. Nevertheless, changes in practices will not produce the desired developments unless they are accompanied by a change in the organisational culture, which itself requires a change in mentalities.

So the question of the relation of the agents to the tool conceals a multitude of dimensions, calling for the exploration of new theoretical fields. The hidden, buried dimensions of management systems need to be brought to light, and it must be highlighted that beyond the technical legitimacy of the instrument, there are political issues at stake (Lascoumes & Le Galès, 2004). Thus, a report by the OECD (2005) shows that the new systems of public management generate adverse consequences, but also some unexpected positive effects on the relations between agents. Yet these relations were not envisaged in the processes implemented, which were reduced to their instrumental and mechanistic dimension. And therein lies the key. Beyond the somewhat coercive promotion of responsibility, management control can only improve performance if it is also used as a tool of socialisation of the managers, raising their awareness about economic necessities and strategic choices. Clearly,

¹² The better authors know that wishing to achieve goals with the use of refined tools while neglecting or taking for granted the necessary team cooperation is a classical, bureaucratic view that runs the risk of ending in failure (Bouquin 2005a).

this shifts control away from a mechanistic view of the organisation. The implementation of management control must take into account the games of agents and the formal and informal, visible and invisible, surface and submerged systems of control, integrating the questions of norms of behaviour, the distribution of power and the roles of the agents.

3. Findings and Limitations of the Research

This representation that we propose conveys the idea that management control is a system characterised by a visible, formalised dimension – expressed through techniques, procedures and tools – and a hidden, informal dimension, relating to the remote control of behaviour and consequently comprising human and managerial aspects. The metaphor of the iceberg allows us to express this duality. But beyond this figurative representation, can metaphorization be considered to play a role in scientific knowledge, and if so, what are its limits?

3.1. Benefits for Academics

As we have mentioned, modern semanticists have emphasised the fact that the aesthetic function is not the sole purpose of metaphor; that this rhetorical figure can fulfil several other functions, some of which are extremely useful in a scientific context, for communicating learning, favouring the emergence of new elements of knowledge and even knitting these latter into a coherent system.

The iceberg metaphor allows us to create a representation of control systems and to adapt this representation to the evolution of these systems and to the new questions of research to which they give rise, particularly in a not-for-profit context. It allows us to open up new horizons, to break with the dominant representation, to create a network of terms that will shed light on the dimensions we wish to emphasize. In other words, and in the same way that Ries & Trout (1986) conceived their “marketing warfare” as an alternative to customer-centric marketing, we propose for discussion an alternative model to the existing representations of control, drawing our attention to the contrast between a visible dimension and a hidden (in the sense of “less easily perceptible”) dimension; to the contrast between the importance (in size and significance) of the tools and the importance of the managerial and human dimensions, and, correlatively for researchers, the contrast between the means of apprehending the visible part and those needed to understand the hidden dimensions; to the position of the different components of the control systems: the tools more on the surface, because they are used notably as an interface with the outside world; the human dimensions deeper down, because they bring into play mechanisms that are not immediately accessible, buried with the organisations.

To sum up: management control is a complex object of research that we represent in the form of an iceberg, signifying that one cannot apprehend it quickly and with simple tools, which only give access to the visible part, the “tip of the iceberg”. Hopwood (1974) showed that the technical component of control is coupled with social components and mechanisms of self-control. Our intention has been to produce a figurative image of these characteristics. Representing management control as an iceberg is therefore not an attempt to embellish our ideas, but to express our conception and understanding of our object of research. We believe that the complexity of this object and the numerous dimensions it comprises can be revealed by this metaphor, the interest of which lies first and foremost in the intuitions that it can generate. Because it focuses our attention on the object of research in a particular fashion, the metaphor serves to deepen our knowledge of that object, by uncovering the important dimensions. It leads us to reduce the complexity of the object to reveal the underlying model, offering us a representation through which we can decode organisational situations.

Landheer (2002) believed that the cognitive function of the metaphor appeared particularly during the reworking of metaphorical conceptualisation, which favours the creation of new ideas and new knowledge. Metaphor then plays a creative role (Morgan, 1980) by breaking the existing cognitive frameworks to favour the creation of new ones. In this way, the shift from the cybernetic metaphor to that of the iceberg invites us to consider control differently, to bring to light some of its specificities and thus, hopefully, to generate new ideas and encourage new intuitions. It allows us to give an alternative, evolving representation of our object of research, to conceive it in a different way by changing our mental models (Hill & Levenhagen, 1995). Lakoff & Johnson (1980) affirm that metaphors are conceptual and that they convey *de facto* a “way of thinking” our objects.

3.2. Limitations

However, if it is often enlightening, the metaphor can also lead to the oversimplification of phenomena. This is the case when the metaphor is simplistic or restrictive, but more generally, we must agree with Morgan (1980) that the metaphor proposes a partial view of the organisation by focusing on a limited number of variables. Le Roy (1997) reminded us that Einhorn & Hogarth warned the users of metaphors: “metaphors provide models of phenomena and thus direct attention to specific aspects and variables ... As should be clear, the choice of one particular metaphor is crucial since it directs attention to a limited set of variables, thereby excluding others”. Is it therefore desirable to evaluate the scope and limits of the metaphors we use, by a process of formal empirical validation? The researchers who have attempted this have obtained often contradictory results (Le Roy, 1997) and the methodology of validation has yet to be invented (McCourt, 1997; Cornelissen & Kafouros, 2008).

Indeed, the criticisms levelled at metaphorization always concern its utility and status. How can the relevance of the transposition be proved? What are the conditions of its validity? What is its scope? What limits? How does it contribute to the progressive accumulation of knowledge? Le Roy (1999) proposed an approach in three stages. (1) Restrict the analysis to precise properties so as to obtain analogies rather than metaphors. (2) Express the analogies systematically in the form of refutable propositions. (3) Empirically test the relevance of the analogy. However, the implementation of these principles would appear to be no simple matter.

No doubt the important thing is simply to be cautious in one's conclusions and to avoid using the metaphor for what it is not. All the more so since it can bear the stamp of an ideology: Tsoukas (1993), for instance, argues that all metaphors are a source of ideological distortion. In this sense, they are imbued with subjectivity and can be manipulative. Faced with these limits, Thède (1998, our translation) suggested that: “Rather than not using metaphors at all, the most reasonable solution is probably to specify the nature or the bias of metaphors, so as to indicate their limits and attempt to correct them when necessary”.

Subject to this common-sense condition, it is reasonable to think that scientific research cannot do without them: “No doubt metaphors are dangerous [...]. But a prohibition against their use would be a willful and harmful restriction upon our powers of inquiry” (Black, 1995).

Thus, the iceberg metaphor has allowed us to describe, understand and explain our object of research. Our particular field of research favoured the intuition that it would be fruitful to describe management control as an iceberg, but we do not believe that this metaphor is specific to this field.

Nevertheless, we are aware that the use of metaphor has numerous shortcomings and induces distortions in the perception of the object of research. By highlighting certain dimensions of the object, it leads the researcher to neglect others. It is obviously subjective. Thus, in examining management control through the metaphor of the iceberg, we have been led to focus our attention on one perspective to understand the situations under study and to privilege one point of view: that which is focused on the contrast between the visible and hidden dimensions.

But beyond its positive contributions and limitations, we hope that this representation will open up prospects of original research (Allbritton, 1995), alternatives to the works based on the cybernetic metaphor or that of disciplinary surveillance. The iceberg metaphor provides us with potential avenues of future research to develop and enrich this model. At present, this gives a simple schematization in graphic form, thus imitating (relatively speaking!) the *ingegno* by *disegno* of Leonardo da Vinci, the “graphic thinking” that allows to model complexity. Its internal coherence could be tested, improved or enriched by further studies or through contact with new theoretical frameworks.

We also hope that it will open up a space for discussion with other researchers who might find that it throws new light on their own research or wish to use their results to discuss, refute or develop the proposed representation, recognising, with Jamet (2009), that “metaphor is not reality, but only one vision of reality”.

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Annex: a proposition for the representation of management control

